

Randal K Quarles: Frameworks for the Countercyclical Capital Buffer

Speech by Mr Randal K Quarles, Vice Chairman for Supervision of the Board of Governors of the Federal Reserve System, at the "Strategic Approaches to the Fed's Balance Sheet and Communications" Spring 2019 Meeting of the Manhattan Institute's Shadow Open Market Committee, New York City, 29 March 2019.

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It is a pleasure to address the Manhattan Institute's Shadow Open Market Committee (SOMC) today.¹ The SOMC has long served as an important forum for debate regarding the appropriate stance of monetary policy--debates that have often brought alternative perspectives to the challenges facing the Federal Open Market Committee (FOMC) in the pursuit of its dual mandate of maximum employment and stable prices. As Allan Meltzer wrote about his and Karl Brunner's founding of the SOMC, "Our objective at the time and after was not just to complain about the results of policy actions. ... We hoped also to improve policy discussion."²

This afternoon, I will briefly remark on the economic outlook and the current stance of monetary policy, and I would then like to devote some time to a discussion of the approach the Federal Reserve has taken on the setting of the countercyclical capital buffer (CCyB) and why I see a setting of 0 percent, as recently affirmed by the Board, as the current appropriate setting for the CCyB. Also, I will review some of the international experience with the CCyB. Given that the CCyB is a relatively new element of our regulatory toolkit, the international experience has the potential to provide useful information on how the CCyB can be made most effective.

The Economic Outlook

But first, let me turn to the economic outlook. At last week's meeting, the FOMC left the policy rate unchanged and reiterated its patient approach toward future policy adjustments.³ I supported this decision. It is prudent at this point to watch the evolution of the incoming data in determining the appropriate stance of policy, particularly given some indication that growth has slowed, at least temporarily, in the most recent data. That said, I remain optimistic about the outlook for the U.S. economy, and I think that we have the potential to maintain growth at a healthy pace in the years ahead.

With regard to the recent data, a sharp falloff in some retail sales measures in December suggested a slowing of consumption, the mainstay component of aggregate demand. While I would not suggest ignoring this decline, it does seem rather inconsistent with a number of other indicators, including the continued strength of the labor market and wage gains in recent months.

And the labor market does remain strong. Even with a weak reading in February, the three-month average gain in payrolls, at 186,000, remains above most estimates of the pace of job gains needed to maintain downward pressure on an already historically low unemployment rate. As with retail sales, the February payroll number seems a bit odd, especially when measured against the continued strength of the household survey for the same month. That said, weak February payrolls are another reason to continue patiently watching the data to see how economic conditions evolve.

Looking past the near-term data, I see many reasons to expect relatively strong growth in the coming years, supported by gains in the productive capacity of the economy. Regarding the inputs of production, I have been encouraged by the increase in labor force participation over the past year. After a period of subdued growth, investment was also strong last year, with spending on equipment and intangibles rising 7-1/2 percent, increasing the capital stock and adding to the productive potential of the economy. Though some recent investment indicators have been less

robust, these data are volatile, and I expect continued gains supported by profit growth, continuing impetus from incentives in the tax bill, and a generally favorable business environment.

Most important, I have been encouraged by the recent step-up in labor productivity growth. Last year's increase of almost 2 percent marked the strongest growth since the immediate aftermath of the financial crisis and was well above the 1 percent pace that prevailed in the preceding five years. I think there are many reasons to believe that this faster productivity growth could be persistent. My expectation for further increases in capital spending is one. For another, it could be that tight labor markets have played a role in boosting labor productivity growth as employers work to increase efficiency as new workers become harder to find.

Turning to inflation, given the volatility and idiosyncrasies of the data, I view the current reading on core PCE (personal consumption expenditures) inflation, at 1.8 percent, as being roughly consistent with our 2 percent objective. Overall, inflation pressures are muted. But I do not believe that the seeming unresponsiveness of inflation to the apparent tightness of the labor market and other aspects of the economy tells the whole story in evaluating slack versus constraint in the economy. Of the many explanations for this phenomenon that have been offered, one possibility that we have to keep in mind is that inflation has remained stable precisely because of the public's confidence that the Fed will maintain a framework that keeps the economy from overheating and inflation from rising significantly above the 2 percent benchmark. Inflation could then for some time remain quite stable in the face of an economy running hot. But if public confidence began to erode because of Fed inaction, a possible consequence could be the de-anchoring of inflation expectations, rather than a gradual and controlled move to an inflation rate sustainably around our 2 percent goal. Of course, there are a variety of alternative explanations for the current surprising relationship between inflation and unemployment, and perhaps all of them are part of a full account. We should also be wary of a material and durable downward drift in inflation expectations below our objective, were we to see that develop, perhaps due to secular changes in the formation of prices or perceived constraints on the ability of monetary policy to react to future downturns. Either way, as a matter of prudent risk management, we must conduct policy in a manner consistent with keeping inflation near target, validating the public's trust in our commitment to our inflation objective and keeping inflation expectations anchored.

In regard to policy, I am very comfortable remaining patient at this point and monitoring the incoming data. That said, my sense is that further increases in the policy rate may be necessary at some point, a stance I believe is consistent with my optimistic view of the economy's growth potential and momentum. In the language of central banking, my estimate of the neutral policy rate remains somewhat north of where we are now.

Communicating a data-dependent policy framework can be challenging, especially if we do not want to appear to be overly discretionary. It would probably be clearest if we defined what data we are dependent on and how we depended on those data--that is to say, if we adopted a monetary policy rule. Strict rules, however--to achieve their valuable heuristic benefit--are as much about ignoring some data as they are about paying attention to other specific data. Indeed, while rules provide useful and important benchmarks, the complexity and evolving nature of the economy at the current juncture argue for the consideration of a wide range of indicators in assessing the state of that economy. This, in turn, can complicate the communication of data dependence: How can we adopt and convey a clear strategic stance on policy while maintaining our credibility if evolution of the data requires an evolution of that strategy?

I prefer a framework where we make it clear that we are focused on broad trends--elsewhere I have used the aviation analogy that we should not "chase the needles" on the instrument panel. We should be clear that, while we will respond to clear and durable evolution in these broad trends, we are not reacting to every piece of volatile data.⁴

The Countercyclical Capital Buffer and Financial Stability

Let me now shift gears and return to the CCyB, beginning with how it fits within our broad set of efforts to promote financial stability. The core of that approach has been to establish a set of structural, through-the-cycle regulatory and supervisory standards to ensure resilience against a broad range of shocks. In contrast to the pre-crisis framework, banks, especially the largest and most systemic banks, are now required to maintain substantially higher and higher-quality loss-absorbing capital and other cushions; stress testing examines the resilience of large banks to severely adverse economic conditions; liquidity requirements and regulatory incentives to limit reliance on short-term wholesale funding have reduced funding risk among large banks and their affiliated broker-dealers; and resolution planning requirements reduce the risks that the failure of a large firm would spill into the broader economy. Outside of the banking system, money market mutual fund reform has reduced this sector's susceptibility to destabilizing runs by investors, and requirements that many derivatives be centrally cleared have decreased the opacity and interconnectedness that contributed to the chaos of 2008.

In addition to these through-the-cycle measures, the Federal Reserve actively monitors for the buildup of financial stability vulnerabilities and can require large banks to increase their loss-absorbing capacity through increases in the CCyB when systemic vulnerabilities are sufficiently large. While such countercyclical tools are new, their goal is to mitigate the buildup of vulnerabilities during buoyant periods, since experience has proven time and again that vulnerabilities can build during good times as risk appetite grows and memories of earlier instability fade.

Effectively mitigating the buildup of risk through the CCyB requires a systematic framework for analyzing vulnerabilities and a mapping of such changes in financial-sector risks into the appropriate level for the CCyB. The Board developed its framework outlining the objectives of the tool and the factors that would influence the determination of its appropriate level through a process of public consultation.⁵

Under our policy, the primary objective for activating the CCyB is to build financial-sector resilience during periods when the risks to financial stability have risen to meaningfully above normal levels and there is an elevated possibility of potential losses within the banking sector that could place strains on the supply of credit or otherwise substantially impede economic and financial activity. A secondary objective for using the CCyB is its potential to limit the buildup of financial vulnerabilities by slowing the rate of credit expansion--that is, the possibility that the CCyB may "lean against the wind" of credit fluctuations. This secondary objective, both in the original Basel discussions and in the Federal Reserve's framework, is less central.

A notable feature of the Board's current framework is the decision to maintain a 0 percent CCyB when vulnerabilities are within their normal range. Because we set high, through-the-cycle capital requirements in the United States that provide substantial resilience to normal fluctuations in economic and financial conditions, it is appropriate to set the CCyB at zero in a normal risk environment. Thus, our presumption has been that the CCyB would be zero most of the time.

Current Assessment of Financial Vulnerabilities

When, then, would it be appropriate--given this framework--to activate the CCyB? That is, how do we know when financial vulnerabilities are elevated? The Federal Reserve continuously monitors vulnerabilities, as highlighted in our recent *Financial Stability Report*.⁶ Our approach is organized around tracking four broad vulnerabilities that academic research and practical experience have shown can amplify negative shocks and result in outsized losses in the real economy. These are asset valuation pressures, household and business debt, funding risk, and financial-sector leverage. As part of this process, the Board considers a number of quantitative indicators--one of which is the credit-to-GDP (gross domestic product) gap proposed in the

Basel Committee guidance--that are indicative of potential vulnerabilities. Nonetheless, judgment must play an important role in this process, especially in assessing how interactions between vulnerabilities may serve to mute or amplify the transmission of different kinds of shocks. The framework requires further judgment as to whether the CCyB is the most appropriate tool to address the particular areas of concern, which will depend on, among other things, the extent to which banks subject to the CCyB are exposed to vulnerabilities or contributing to them.

Assessing the current state of financial vulnerabilities is thus a critical part of the decision on whether to activate the CCyB. Let me briefly give you my view of each of the four categories in turn.

Asset valuations increased to the high end of their historical ranges in many markets over 2017 and the first half of 2018, supported by the solid economic expansion and an apparent increase in investors' appetite for risk. The market volatility and subsequent rebound have muddied the picture somewhat; however, it does seem that valuation pressures have eased to some extent in a particular locus of concern, the market for leveraged loans--that is, syndicated loans to lower-rated or unrated borrowers with already significant debt loads.

Now, regarding debt outstanding, borrowing by businesses has reached a historically high level relative to the size of the economy or business assets and there are also signs of deteriorating underwriting standards. Of course, this has happened at a time when corporate profits relative to the size of the economy are also quite high, mitigating some of the concern this might suggest--but the riskiest forms of business debt have increased the most amid such signs. These developments could potentially leave the corporate sector vulnerable to a sharp slowing in economic growth, although we think the banking sector has only limited direct exposures to such borrowers and, to the extent they can be measured, indirect exposures are also limited.

The notable levels of vulnerability in asset valuation pressures and business borrowing must be considered alongside modest vulnerabilities associated with household borrowing and the historically low levels of financial-sector leverage and funding risk. Household debt relative to GDP has fallen substantially from the level of a decade ago, and the credit quality of household borrowing remains relatively solid, despite pockets of weakness evident in some areas of auto lending. Even more important, banks now have substantially higher-quality capital and more of it than in the 2000s, owing importantly to the structural reform of capital requirements and stress testing. In fact, under last year's stress tests, capital levels at the largest U.S. banks after a hypothetical severe global recession would have been higher than the actual capital levels of large banks in the years before the crisis. Moreover, around 20 percent of the assets of the most systemically important financial institutions are highly liquid assets that can be sold quickly in the event of stress. And, following reforms to money market mutual funds and other steps, the volume of short-term uninsured funding, most prone to runs, is well below pre-crisis levels.

Taken as a whole, financial system vulnerabilities strike me as being not outside their normal range, which is consistent with a zero CCyB under the Board's framework and is why I supported the Board's decision to keep the CCyB at zero earlier this month.

International Experience with the Countercyclical Capital Buffer

While policymakers in the United States have maintained the CCyB at zero since 2016, other countries have adjusted their countercyclical buffers in response to vulnerabilities within their financial sectors. Currently, 13 countries have announced a CCyB above zero, ranging from 0.25 percent in Luxembourg to 2.5 percent in Hong Kong, Norway, and Sweden.⁷ The CCyB is a novel approach to financial regulation, and I think it is important that we, as regulators, learn from other countries' experiences with the CCyB. I see three important explanations for differences in the CCyB across countries.

Perhaps the most important and direct reason for different CCyB levels among different

countries is that they face different vulnerabilities. According to national authorities' announcements, the decisions to activate the buffers were generally motivated by credit growth, household debt, and housing prices; in this regard, it is notable that mortgage credit or house prices have expanded rapidly in several countries deploying the CCyB, including Hong Kong and the Nordic countries that have set their CCyB at 2.5 percent. For example, the Hong Kong Monetary Authority's decision to increase the CCyB level to 2.5 percent in January 2018 was importantly linked to housing developments.

Another explanation for the differences in observed CCyB levels across countries is the range of available macroprudential tools to stem the buildup in financial vulnerabilities in different countries and the degree to which such tools have been the preferred means for addressing identified vulnerabilities.⁸ For example, housing market booms, as noted above for Hong Kong, have been a concern in several countries in recent years.⁹ Accordingly, some national authorities have used macroprudential tools focused on housing, such as caps on loan-to-value ratios, to try to increase the resilience of borrowers and to indirectly strengthen the resilience of the banks and the financial system should their housing booms turn to busts. For example, policymakers in Canada have not activated the CCyB in response to concerns about housing market risks, but they have lowered the maximum loan-to-value ratio for various mortgage products and capped debt-service-to-income ratios.¹⁰ The availability of such alternative tools for limiting systemic risk may be among the factors influencing the decision to adjust, or not adjust, the CCyB in a number of countries. In this regard, it is notable that the set of macroprudential tools in the United States is limited relative to that in many other countries.¹¹

Finally, another difference, one that is particular to the United Kingdom, is the framework adopted by the U.K. Financial Policy Committee (FPC) to integrate the CCyB with its structural capital requirements. Specifically, under the FPC's framework, the CCyB would equal 1 percent in standard risk conditions--but to avoid having this be a significant increase to already very high levels of capital, the FPC undertook a one-time adjustment to its other capital buffers in order to offset part of this increase. The effect of the policy is that the buffer can be varied--both up and down--in line with the changing risks that the banking system faces over time. This approach is an interesting deviation from the idea in the original Basel discussions and the framework adopted in many other jurisdictions, in which structural capital requirements are set at levels aimed to deliver the desired level of resilience, with the CCyB raised to positive values only at times when vulnerabilities are above normal.

In practice, the U.K. framework appears to have provided the FPC with additional flexibility, as it has adjusted the CCyB with evolving financial risks associated with, for example, Brexit. As I examine this experience, systems similar to the United Kingdom's, where the CCyB is positive during normal times, may allow policymakers to react more quickly to economic, financial, or even geopolitical shocks that occur amid otherwise normal conditions, without relying on the slow-moving credit aggregates contemplated in the original Basel proposal. Moreover, this setting of the CCyB permits more gradual adjustments in the CCyB, especially in periods with a high degree of uncertainty about the level of financial vulnerabilities. Another possible benefit of a system that has additional flexibility is the ability to coordinate the setting of the CCyB with the setting of monetary policy in situations where such coordination is valuable. At the same time, I would not expect such situations to be the norm, as the objectives and governance of monetary policy and macroprudential policies are separate for good reasons.

Conclusion

In the United States, we have built a substantially safer financial system by focusing on using structural tools that confer through-the-cycle resilience. With that construction work largely behind us, attention naturally turns to the set of time-varying financial regulations--particularly the CCyB.

The overall capital framework in the United States has been designed to ensure high capital levels without having to activate the CCyB, with the implication being that the bar for activation would be a high one; but, as a result, much of the time there would not be any buffer to reduce if conditions were to precipitously deteriorate. The United Kingdom's approach to setting the CCyB also relies on having a high overall level of capital during normal times, but, by "swapping" some portion of static capital for CCyB in reaching that high capital level during normal times, and thus making some of that capital part of a releasable buffer, U.K. policymakers have built in more flexibility to move buffers down in times of stress. Other countries provide additional "data points" in terms of possible ways of approaching the CCyB.

With the CCyB in active use around the world, I am confident that the academic and policy communities will learn a great deal about how best to use this new tool to build a more resilient financial system.

¹ These remarks represent my own views, which do not necessarily represent those of the Federal Reserve Board or the Federal Open Market Committee.

² See Allan H. Meltzer (2000), "The Shadow Open Market Committee: Origins and Operations," *Journal of Financial Services Research*, vol. 18 (December), pp. 119–28 (quoted text on p. 120).

³ See Board of Governors of the Federal Reserve System (2019), "[Federal Reserve Issues FOMC Statement](#)," press release, March 20.

⁴ See Randal K. Quarles (2018), "[Don't Chase the Needles: An Optimistic Assessment of the Economic Outlook and Monetary Policy](#)," speech delivered at the Economic Club of New York Luncheon, New York, October 18.

⁵ In December 2015, the Board invited public comment on a proposed policy statement describing the framework that the Board would use to set the amount of the U.S. CCyB. See Regulation Q—Capital Adequacy of Bank Holding Companies, Savings and Loan Holding Companies, and State Member Banks, 12 C.F.R. pt. 217, app. A (2018). See also Federal Reserve System (2016), "Regulatory Capital Rules: The Federal Reserve Board's Framework for Implementing the U.S. Basel III Countercyclical Capital Buffer," proposed policy statement with request for public comment (Docket No. R-1529), *Federal Register*, vol. 81 (February 3), pp. 5661–66. See 12 CFR part 217, Appendix A. See also 81 FR 5661 (February 3, 2016).

⁶ See Board of Governors of the Federal Reserve System (2018), [Financial Stability Report \(PDF\)](#) (Washington: Board of Governors, November).

⁷ This figure includes countries that have announced a positive CCyB that will become effective at some point within the next year.

⁸ See International Monetary Fund, Financial Stability Board, and Bank for International Settlements (2016), [IMF-FSB-BIS, Elements of Effective Macroprudential Policies: Lessons from International Experience \(PDF\)](#) (Basel, Switzerland: IMF, FSB, and BIS, (August 2016).

⁹ Such booms have raised concern in Australia, Canada, and the Nordic countries. See International Monetary Fund (2018), Source: IMF, [Global Financial Stability Report](#), (Washington: IMF, October 2018).

¹⁰ See Bank of Canada (2017), [Financial System Review \(PDF\)](#), (Ottawa: BOC Bank of Canada, November 2017).

¹¹ Another example of a macroprudential tool used in some countries is a sector-specific version of the CCyB. Switzerland, for example, has activated a housing-sector CCyB to address imbalances related to residential mortgage and real estate markets. See Swiss National Bank (2013), "[Countercyclical Capital Buffer: Proposal of the Swiss National Bank and Decision of the Federal Council](#)," (PDF) press release, February 13.